

# Van Café 1986-1991 Vanagon Headlight Relay Kit

## Tools Required:

#2 Phillips Screwdriver

Wire Stripper / Crimper

Heat Gun or Small Butane Torch

Remove the fuse block from the firewall under the left-hand corner of the dash by removing the two large Phillips head screws on the mounting bracket. Remove the metal mounting bracket along with the fuse block to allow better access to the space behind the fuse block where you will be working.

Locate the grounds for the headlights on the crown shaped grounding trees (above the fuse block on the left wall area). The headlight grounds will be 2 brown wires joined together with one 1/4" female terminal. Verify that you have the correct wires by removing the ground while the headlights are on.

Cut the old connector off the stock headlight grounds and crimp one of the new 1/4" female terminals provided in the kit onto each of the wires. Reinstall these ground wires to any empty spot on the grounding trees to improve the ground path for the headlights.

## REMOVE THE NEGATIVE BATTERY TERMINAL BEFORE PROCEEDING FURTHER.

Connect the Brown wires from both relays to the grounding trees above the fuse box. There will be some empty male tabs on the grounding trees. You can move the other ground wires around to make this easier if necessary. Push the 1/4" female terminals onto any of the empty male ground tabs. If there are not enough open spaces, use the enclosed piggyback adapter to install both wires onto one tab.

Remove the lower steering column cover by removing the two mounting screws and pulling downward gently on the cover to expose the headlight wiring.

Locate the headlight wires running down from the high/low beam selector lever on the steering column to the fuse block. The Yellow wire that goes to position A21 on the fuse block is the low beam wire. The White wire that goes to position B22 on the fuse block is the high beam wire. Cut each of these wires about 4" back from the fuse block so they will easily reach the wires attached to the relays and strip about 1/4" of insulation from each end of these wires.

Crimp the end of the stock Yellow wire coming from the high/low beam selector switch to the Yellow 16GA (thinner) wire on the relay harness. Crimp the remaining end of the stock Yellow wire that runs to fuse block position A21 to the 12GA Yellow (thicker) wire on the relay.

Crimp the end of the stock White wire coming from the high/low beam selector switch to the White 16GA (thinner) wire on the relay harness. Crimp the remaining end of the stock White wire that runs to fuse block position B22 to the 12GA White (thicker) wire on the relay.

The butt connectors used to connect the relays to the stock wiring feature heat shrink tubing and internal adhesive. After crimping the connectors, carefully apply heat to the blue tubing with a heat gun or small butane torch to shrink the tubing and seal them to the stock wire insulation.

In the lower left hand corner on the back of the fuse block you will see two thick red wires with large white plastic connectors. Directly above these wires are several sets of 1/4" male spade terminals known as the "P" connectors that will supply power to the relays. Connect the Red wires from both relays to any empty male spade terminals.

Install the relays by sliding each relay base into an open groove on top of the fuse block. Once they are fully seated, they will lock securely in place.

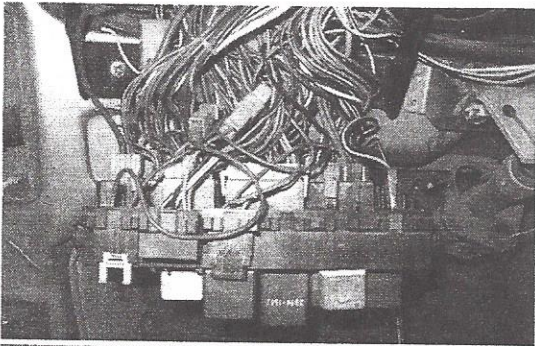
Reinstall the fuse block into its original position.

Reconnect the negative battery terminal and verify proper headlight operation.

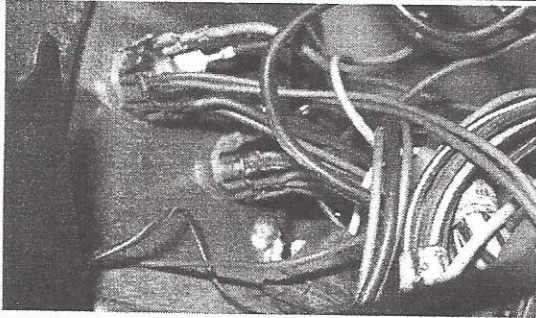
If you choose to increase the wattage of the main 9004 headlight bulbs to 80/100W, replace the stock 10A high beam fuses (#9&#10) with the included 15A fuses. The use of 100W H3 bulbs in the inner high beam lenses is not recommended, since the total power draw is very close to the design limits of the stock wiring and could cause damage to the wiring and the stock headlight sockets.



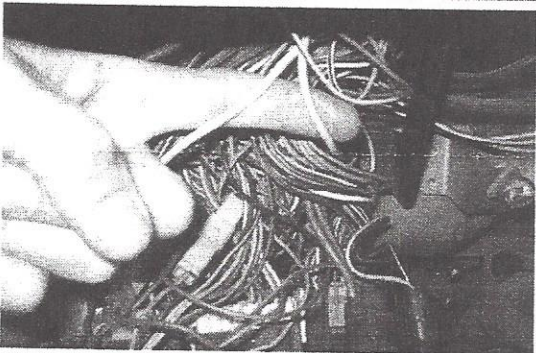
# 1986-1991 Vanagon Headlight Relay Photos



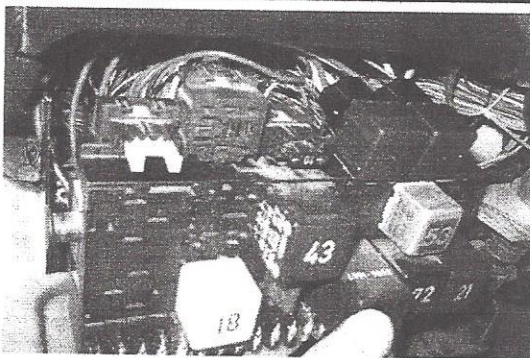
Fuse block lowered from mounting bracket to allow easy access to rear electrical hookup area.



Grounding star lugs on left wall of van above fuse block. Depending on the options on your van there are usually 4-6 open connectors.



12GA wires for headlamps running from the dimmer switch to the fuse block. The upper portion of these wires is usually (but not always) covered in a black plastic protective sheathing. Finger shown in approximate wire cutting position, about 4" back from the fuse block.



Relay installation complete. Ready to lift back into place on mounting bracket.

**Liability Disclaimer:** It is the sole responsibility of the buyer/ installer to ensure that the installation of this product is carried out in a safe manner. If you are not comfortable with the installation of this accessory kit on your own, please consult a qualified automotive electrician. By undertaking installation, the buyer agrees to hold the seller free from liability for any damage that may occur during the installation.

**Warranty:** All parts are warranted to be free from manufacturing defect for a period of one year from the date of purchase.